

### REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claim 15 has been cancelled.

New claims 16 and 17 have been added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-3, 5-14, 16, and 17 are now pending in this application.

#### **Rejections under 35 U.S.C. § 103**

Claims 1-3, 5-7, and 13-15 are rejected under 35 U.S.C. § 103(a) as allegedly being anticipated by U.S. Patent No. 4,572,766 to Dimitriou (hereafter "Dimitriou") in view of WO 03/010482 to Blomgren (hereafter "Blomgren"). This rejection is respectfully traversed.

The Office argues on pages 2-3 of the Office Action that Dimitriou discloses a heat exchanger that includes an opening for a second medium and heat exchanger passages in an end region of a disk, citing the fluid inlet 24 and openings 32, 33 shown in Figure 3 of Dimitriou.

However, as noted on page 3 of the Office Action, Dimitriou does not disclose or suggest a heat exchanger in which a portion of a heat exchanger medium passage is behind at least a portion of an opening for a second medium.

Instead, the Office notes on pages 2-3 of the Office Action that the openings 32, 33 are offset axially from the opening 24 and located further inward from an end of the disks of the heat exchanger of Dimitriou than the opening 24. Thus, Dimitriou does not disclose or

suggest a heat exchanger, wherein at least a portion of the heat exchanger medium passages is located behind at least a portion of the opening for the second medium when a respective disk is viewed in a plane of the respective disk along a longitudinal axis of the respective disk and in a direction extending from an end of the disk where the end region is located to an opposite end of the respective disk, as recited in claim 1. Claims 2, 3, 5-7, and 13-15 depend from claim 1.

Nor does Dimitriou disclose or suggest a heat exchanger, wherein at least another portion of the opening for the second medium is located behind at least another portion of at least one of the heat exchanger medium passages when the respective disk is viewed in the plane of the respective disk in a direction perpendicular to the direction extending from an end of the disk where the end region is located to an opposite end of the respective disk, as recited in claim 1. As suggested by the Office on pages 2-3 of the Office Action the openings 32, 33 of Dimitriou are offset axially from the opening 24 and located further inward from an end of the disks than the opening 24.

Blomgren discloses a plate heat exchanger with a first vapour inlet port 1 for a first fluid in vapour form, a first outlet port 2 for the first fluid in condensed form, a second inlet port 3 for a second fluid, and a second outlet port 4 for the second fluid. See abstract of Blomgren and Figures 1 and 2.

The Office suggests on page 3 of the Office Action that the first vapour inlet port 1 for the first fluid in vapour form is located behind the second outlet port 4 for the second fluid.

However, Blomgren does not disclose or suggest a heat exchanger, wherein at least another portion of the opening for the second medium is located behind at least another portion of at least one of the heat exchanger medium passages when the respective disk is viewed in the plane of the respective disk in a direction perpendicular to the direction extending from an end of the disk where the end region is located to an opposite end of the respective disk, as recited in claim 1.

As shown in Figures 1 and 2 of Blomgren, no portion of the first vapour inlet port 1 for the first fluid in vapour form is located behind the second outlet port 4 for the second fluid

when viewed in a plane of a respective disk in a direction perpendicular to a direction extending from an end of the disk where an end region is located to an opposite end of the respective disk, as recited in claim 1.

One of ordinary skill in the art would have understood that if the heat exchanger of Dimitriou were to be modified by the teachings of Blomgren that the openings 32, 33 of Dimitriou would be located behind the opening 24 of Dimitriou such that no portion of the opening 24 would be behind the openings 32, 33 when viewed in a plane of a respective disk in a direction perpendicular to a direction extending from an end of the disk where an end region is located to an opposite end of the respective disk, as recited in claim 1.

For at least the reasons discussed above, Dimitriou and Blomgren do not render claims 1-3, 5-7, and 13-15 to be unpatentable because combination of Dimitriou and Blomgren does not disclose or suggest all of the features of claim 1. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 8-12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Dimitriou and Blomgren in view of U.S. Patent No. 5,230,966 to Voss *et al.* (hereafter “Voss”). This rejection is respectfully traversed. Voss fails to remedy the deficiencies of Dimitriou and Blomgren discussed above in regard to independent claim 1, from which claims 8-12 depend. Reconsideration and withdrawal of this rejection is respectfully requested.

### **New Claim**

New claims 16 and 17 have been added. Claims 16 and 17 depend from claim 1 and are allowable over the prior art for at least the reasons discussed above and for their respective additional recitations.

In addition, claim 16 recites “wherein the disks are of axially symmetrical design with respect to their transverse axis and with regard to the heat exchanger medium passages and the opening for the second medium.

Blomgren discloses that inlet port 1 for the first fluid in vapour form must be larger than the outlet port 2 for the first fluid in condensed form due to the phase change and to minimize a pressure drop so that these ports 1, 2 are asymmetric. See Blomgren at page 3, lines 4-17.

The openings of Dimitriou are also necessarily asymmetric because the heat exchanger of Dimitriou also involves a phase change between a heating fluid and a condensate of the heating fluid. See Dimitriou at col. 6, lines 5-14.

For at least these reasons, the combination of Dimitriou and Blomgren does not disclose or suggest all of the features of claim 16. In fact, Dimitriou and Blomgren teach against the features of claim 16.

### **Conclusion**

Applicant submits that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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Date \_\_\_\_\_

By



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